

In the Abstract: [Use ~~strikethrough~~ for deleted matter and underlined for added matter.]

Please replace the pending abstract with the newly-submitted abstract attached herewith on a separate sheet.

ABSTRACT OF THE DISCLOSURE

Systems and methods are provided for automatically configuring cross-connects in an ATM based switch between a plurality of user side communications channels and a plurality of network side communications channels provided from an ATM service provider. The switch comprises a plurality of user ports, an uplink interface, a backplane interface, and a switch concentration module (SCM). The SCM automatically configures a plurality of cross-connects between the plurality of user side communications channels and the plurality of network side communications channels. The SCM incorporates a method involving (1) obtaining a default logical VPI/VCI address associated with the plurality of network side communications channels, (2) defining a first plurality of unique logical VPI/VCI addresses based on a predefined set of rules for incrementing logical VPI/VCI addresses, each of the first plurality of unique logical VPI/VCI addresses associated with one of the plurality of user side communications channels, (3) determining a second plurality of unique logical VPI/VCI addresses based on the default logical VPI/VCI address and the predefined set of rules, and (4) creating a plurality of cross-connects between the plurality of network side communications channels and the plurality of user side communications channels by linking the first and second unique logical VPI/VCI addresses.

ABSTRACT OF THE DISCLOSURE

Systems and methods are provided for automatically configuring cross-connects in a switch. One exemplary embodiment is a digital subscriber line access multiplexer for automatically configuring a plurality of cross-connects comprising: means for obtaining a default logical VPI/VCI address associated with the plurality of data communications channels; means for defining a first plurality of unique logical VPI/VCI addresses based on a predefined set of rules for incrementing logical VPI/VCI addresses, each of the first plurality of unique logical VPI/VCI addresses associated with one of the plurality of digital subscriber line communications channels; means for determining a second plurality of unique logical VPI/VCI addresses based on the default logical VPI/VCI address and the predefined set of rules; and means for creating signal connectivity between the plurality of data communications channels and the plurality of digital subscriber line communications channels by linking the first and second unique logical VPI/VCI addresses.